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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,028	03/13/2001	Akihiro Kajimura	1247-0454P	8832

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EXAMINER	
CORSARO, NICK	
ART UNIT	**PAPER NUMBER**
2684	

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/804,028	KAJIMURA, AKIHIRO	
	Examiner	Art Unit	
	Nick Corsaro	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-7 and 15-24* is/are allowed.

6)☒ Claim(s) *8-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

RESPONSE TO AMENDMENT

Allowable Subject Matter

1. Claims 1-7 and 15-24 are allowed.

2. The following is a statement of reasons for the indication of allowable subject matter:

The examiner agrees with the applicants argument that the prior art of record does teach finding and correct power level however fails to teach gradually reducing the transmission power by a predetermined amount, and when a transmission failure occurs, raising the power by that amount as the optimum power.

Specification

3. The newly submitted abstract meets the requirements of MPEP § 608.01; therefore objection to the abstract is hereby removed.

Response to Arguments

4. Applicant's arguments filed 07/01/2004 regarding claims 8-14 have been fully considered but they are not persuasive.

The Examiner agrees with the applicant concerning claims 1-7 and 15-24 that Chen et al. (5,960,361) does not disclose increasing the power by the predetermined amount to the optimal power level. However, the limitations of claims 8-14 read on Chen in view of Agrawal. Chen shows incrementally decreasing the power until transmission failure occurs than increasing the power above that level. Chen does not disclose that this is the optimal level, but implies looking for the optimal level via the graphs cited in the body of the reference and the background. This gives motivation to look for a new reference that sets the higher power as the optimal power

levels, therefore, Chen is modified by Agrawal to show it is obvious to one skilled in the art to raise to the optimal power level.

As a result the Applicant's arguments concerning claims 8-14 are not persuasive and read upon the prior art as follows.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 8-10, and 12-14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (5,960,361) in view of Agrawal et al. (5,722,051).

Consider claim 8, Chen discloses a method of automatically controlling a transmission power of a wireless communication apparatus in order to suppress consumed transmission power (see col. 1 lines 8-13). Chen discloses setting the transmission power to a maximum value at a start of transmission (see col. 7 lines 45-59, col. 7 lines 1-67). Chen discloses gradually reducing the transmission power by a predetermined amount, each time when transmission succeeds a predetermined number of times (see col. 7 lines 50-55). Chen discloses in the case of a transmission failure at a transmission power which is gradually reduced by the predetermined amount, determining a power which is higher by the predetermined amount than the transmission power (see col. 7 lines 56-67 and col. 8 lines 1-67).

Chen does not specifically disclose an optimum value. Agrawal teaches an optimum value (see col. 5 lines 25-67, col. 7 lines 1-67, and col. 8 lines 7-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen, and have as an optimum value, as taught by Agrawal, thus allowing conserving resources, reducing interference, an optimizing the transmit power for the error rate, as discussed by Agrawal (col. 2 lines 15-26 and col. 1 lines 15-67).

Consider claim 9, the combination of Chen and Agrawal discloses a system that sets power to an optimal value. Chen however does not specially disclose at a similar radiated energy to the previous control step. Agrawal teaches similar radiated energy to the previous control step (see col. 5 lines 25-67, col. 7 lines 1-67, and col. 8 lines 7-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen, and have a similar radiated energy to the previous control step, as taught by Agrawal, thus allowing conserving resources, reducing interference, an optimizing the transmit power for the error rate, as discussed by Agrawal (col. 2 lines 15-26 and col. 1 lines 15-67).

Consider claim 10, Chen does not specifically disclose once the optimum transmission power is set, the optimum transmission power is maintained unless any transmission failure occurs. Agrawal teaches once the optimum transmission power is set, the optimum transmission power is maintained unless any transmission failure occurs (see col. 5 lines 25-67, col. 7 lines 1-67, and col. 8 lines 7-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen, and have the optimum transmission power is set, the optimum transmission power is maintained unless any transmission failure occurs, as taught by Agrawal, thus allowing conserving resources, reducing

interference, an optimizing the transmit power for the error rate, as discussed by Agrawal (col. 2 lines 15-26 and col. 1 lines 15-67).

Consider claims 12, and 13 the combination of Chen and Agrawal discloses a transmission failure occurs after the optimum transmission power is set, transmission power is raised to the maximum value and resetting of optimum transmission power is carried out (see Chen col. 7 lines 45-67, col. 8 lines 1-35, col. 11 lines 5-67, and Agrawal col. col. 5 lines 1-67, col. 7 lines 1-50, col. 8 lines 7-67).

Consider claim 14 Chen discloses setting a max power and incrementally decreasing (col. 7 lines 56-67 and col. 8 lines 1-67). Chen does not specifically disclose optimum transmission power. Agrawal teaches an optimum value (see col. 5 lines 25-67, col. 7 lines 1-67, and col. 8 lines 7-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen, and have as an optimum value, as taught by Agrawal, thus allowing conserving resources, reducing interference, an optimizing the transmit power for the error rate, as discussed by Agrawal (col. 2 lines 15-26 and col. 1 lines 15-67).

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Agrawal as applied to claims 1, 8, and 15 above, and further in view of Hong et al. (6,298,241).

Consider claim 11 Chen discloses the method and apparatus, as modified by Agrawal above, where Chen and Agrawal disclose finding the optimal power output. Chen and Agrawal further disclose non-interval or communications of frame intervals reaches a preset time period performed at a beginning highest power for finding optimum transmission is started (see Chen col. 7 lines 45-67, col. 8 lines 1-35, col. 11 lines 5-67, and Agrawal col. col. 5 lines 1-67, col. 7

lines 1-50, col. 8 lines 7-67). Chen and Agrawal do not specifically disclose a non-interval transmission time reaches a time threshold maximum jump based on the discontinued transmission during the time interval for determining the proper energy setting. Hong teaches a non-interval transmission time reaches a time threshold maximum jump based on the discontinued transmission during the time interval for determining the proper energy setting (see col. 4 lines 34-67, col. 5 lines 1-67, and col. 6 lines 1-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Chen and Agrawal, and have a non-interval transmission time reaches a time threshold maximum jump based on the discontinued transmission during the time interval for determining the proper energy setting, as taught by Hong, thus allowing adjustments to power in variable environments and more precise settings, as discussed by Agrawal (col. 2 lines 44-60 and col. 3 lines 1-20).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nick Corsaro whose telephone number is 703-306-5616. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nick Corsaro

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PRIMARY EXAMINER

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